

# Political Disaster? Presidential Disaster Declarations and Electoral Politics

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## **Abstract**

Presidential disaster declarations allow the president to unilaterally clear the way for potentially billions of dollars to be distributed to specific constituencies. In an analysis extending from 1981 to 2004, I find that electoral factors (as measured by electoral vote size and statewide competitiveness) influence whether a president issues a disaster declaration. For example, a highly competitive state can expect to receive twice as many presidential disaster declarations than an uncompetitive state, holding all else constant including the damage caused by the disaster. The relationship between competitiveness and disaster declarations has only existed since the late 1980s, before which time there was actually a negative (although statistically insignificant) relationship. Additionally, I find that these decisions have the intended electoral benefits — voters react and reward presidents for presidential disaster declarations. A president can expect a 1.7% increase in a statewide contest in return for a single presidential disaster declaration.

The critical failure of the federal government in dealing with the terrible aftermath of Hurricane Katrina in late summer 2005 brought renewed scrutiny to the process of disaster mitigation and relief by elected officials and public agencies. In an analysis of presidential disaster declarations from 1981 through 2004, I show that starting in 1988, electoral considerations influenced disaster response instead of need alone. Prior to 1988, there is no evidence of this relationship. I argue that closer electoral college victories and a legislative expansion of presidential powers in disaster policy were the causes of this change. Presidents have good reason to reward states with disaster declarations, actions which clear the way for potentially billions of dollars in aid. In an analysis of statewide presidential election contests, I find that these decisions have the intended electoral benefits. Voters reward presidents for disaster declarations to the tune of over 1.5 percent at the ballot box. These findings suggest that our electoral institutions are partly to blame for the quality of U.S. disaster policy. Had policy been dictated by a formulaic process or handled by a less political actor, the response to Hurricane Katrina and other disasters might have been more successful.

### **Presidents: the electoral connection**

Just as Members of Congress have electoral tools at their disposal so too does the president.<sup>1</sup> Among them are presidential disaster declarations. The authority is unilateral and free from the influence of Congress and the bureaucracy. While advances have been made in understanding *when* unilateral powers are used (Moe and Howell, 1999; Howell, 2003), I consider how the president targets the powers in the context of these declarations.

Disaster relief is ripe for “credit-claiming” and “advertising” — the same reelection activities in which Members of Congress engage (Mayhew, 1974) . For instance, the president may court voters in electorally important states by distributing direct benefits including checks made out to voters. Once a presidential disaster declaration is made, individuals are eligible for cash grants,

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<sup>1</sup>Even a second term president is concerned with the electoral well-being of his vice president and political party in the next election. For example, the second term Clinton White House was accused of “running the White House in a manner that looks like a campaign” (Mitchell, 1997).

low-interest loans, tax exemptions, unemployment benefits, crisis counseling, and legal advice from FEMA (FEMA, 2005) as well as loans from the Small Business Administration.<sup>2</sup> While some voters receive federal dollars, many more witness the leadership of the president as he tours ravaged areas and comforts vulnerable victims. Disasters represent major news events that attract viewers who are both inherently interested in the news story and in need of information (Sood, Stockdale and Rogers, 1987).

Disaster declarations are an opportunity for the president to act unilaterally to provide support to voters, and I show that he favors battleground states when considering the requests. The structural aspects of presidential campaigns that affect how campaign resources are targeted also help influence how presidential policy is targeted.<sup>3</sup> Namely, the winner-take-all allocation of electoral votes focuses attention on battleground states, states which are competitive and significant to an electoral college victory. Some scholarship posits that “because [presidents] are elected in a popular vote, [they] tend to represent the preferences of the median voter in society” (Acemoglu and Robinson, 2006, p.115).<sup>4</sup> I argue that the importance of the median voter may be weighted by whether or not she is from a battleground state.

Others reject the idea that electoral competitiveness influences distributive politics. For instance Cox and McCubbins (1986) argues that politicians should target core constituencies in order to preserve electoral coalitions as opposed to targeting swing groups. Larcinese, Rizzo and Testa (2006) in an analysis of the U.S. federal budget finds that “swing states are not rewarded” with federal dollars (p. 447). In the context of presidential disaster declarations, unadulterated by Congressional politics, I find that presidents *do* target swing states.<sup>5</sup>

One other published study directly links electoral factors to presidential disaster declaration.

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<sup>2</sup>FEMA also provides public assistance for rebuilding community infrastructure and hazard mitigation.

<sup>3</sup>See Polsby and Wildavsky (1968); Bartels (1985); Rabinowitz and Macdonald (1986) for examples of the relationship between electoral institutions and campaign behavior.

<sup>4</sup>For other examples of this assumption, see Lohmann and O’Halloran (1994) and Hansen (1998), but see McCarty (2000) for an example where this assumption is not made.

<sup>5</sup>I do not examine whether the president targets core voters, but this would complement the ideas of Cox and McCubbins (1986). Presidential disaster declarations is a better context than budget politics in which to study the electoral incentives of the president. That Larcinese, Rizzo and Testa (2006) finds that the scales are tipped for the party of the president may be less the president acting strategically for his own electoral interest than the party leaders tipping the budget process toward their own collective interests.

In analysis of disaster declarations from 1991 to 1999, Garrett and Sobel (2003) finds that “half of all disaster relief is motivated politically rather than by need.” My analysis here improves upon this important research in several respects. First, I expand the analysis from nine to twenty-three years. This clarifies two crucial questions: When and why the disaster declaration process became politicized? While I find electoral influences policy from 1989 through 2004, I find no effect for declarations from 1981 through 1988. I suggest two compatible explanations for this difference, which I describe in the next paragraph. Third, I examine whether these actions have the intended effect. Do voters reward presidential disaster declarations come election time? While other studies find negative consequences for incumbents in there presence of natural disasters,<sup>6</sup> I find that in the face of presidential action, voters do indeed reward the incumbent come election day.

As the subsequent findings show, disaster declaration policy changed dramatically after 1988. The absolute numbers of declarations increased and the relationship between electoral factors strengthened. Why the change in 1988? I posit two factors as the primary cause of the change.<sup>7</sup> First, the increasing narrowness of presidential elections made electorally crucial states far more obvious. For instance, if Ronald Reagan had to identify states crucial to his win in 1984, it would be quite difficult since no single state (or even handful states) put him over the top. In contrast, George W. Bush could easily identify the state of Florida as extremely important to the contest in 2000. Presidents are well aware of the importance of these efforts to voters. As President Clinton put it, “[V]oters don’t choose a president based on how he’ll handle disasters, but if they’re faced with one, it quickly becomes the most important issue of their lives” (Clinton, 2004, p. 428). The narrowing of electoral college victories after 1988 allowed a clearer identification of states that were in play and important to winning the 270 electoral votes required to win the presidency.

Second in this transformation is the passage on November 23, 1988 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (PL 100-707 and hereafter referred to as the Stafford

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<sup>6</sup>In an analysis of registered voters in the city of Houston in the aftermath of a major flood, Arceneaux and Stein (2006) find that voters who attributed to disaster preparation to local government are “10% less likely to prefer [the incumbent mayor]” (p. 48). Achen and Bartels (2002) focuses on several elections coinciding with drought, flu, and shark attacks and reaches similar conclusions — voters hold incumbents responsible for acts well beyond their control.

<sup>7</sup>Because this is an observational study, it is impossible to say with certainty what caused the change.

Act), which expanded disaster declarations both in the potential benefits that states would receive and in the discretion that the president had. Phil Kuntz of *Congressional Quarterly* characterized the effect of the Stafford Act as follows: “In a single sentence, the [Stafford Act] gives [the President] more power than he’s ever likely to use. ‘In any major disaster,’ the law says, ‘the president may direct any federal agency, with or without reimbursement, to utilize the resources granted to it under federal law...in support of state and local assistance efforts’ ” (Kuntz, 1989, p. 2854). In expanding the power of the president in declaring disasters, Members of Congress allowed the president to act swiftly to respond to exogenous events that required quick and sizable governmental action. Members of Congress did not need to expend their own political capital to get these funds but in enacting the legislation gave the president leverage to achieve his own electoral motives.

### **A model of presidential disaster declarations**

To test the effect of electoral influences on policy outcomes, I examine the nearly one thousand presidential disasters declared in the fifty states for each year from 1981 to 2004 as the dependent variable.<sup>8</sup> The unit of analysis is the total number of disaster declarations in each state for each year. The analysis extends 24 years from 1981 to 2004 and includes 1,200 cases (50 states × 24 years). Table 1 presents evidence of the substantial variation in the number of presidential disaster declarations per state per year. Over the 24 years, Wyoming has the fewest total presidential disaster declarations with 3 and Texas has the most with 44. Every state has at least one year where they received no presidential disaster declarations. Figures describing distribution of disaster declarations by state and across time are presented in the supplemental materials for this article and also show that the distribution of disasters across time and states showed substantial variation.

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<sup>8</sup>The data include 914 disaster declarations from 1981 to 2004. See the supplementary materials for plots of disaster declarations for all years and states.

Both major disaster declarations and emergency disaster declarations are officially authorized by the president and therefore included in my analysis of presidential disaster declaration. I do not include fire management assistance declarations because they do not require the action of the president.

Presidential disaster declarations are typically issued for severe weather events, but in rare circumstances a declaration will be issued for a non-weather related event such as the terrorist attacks on the World Trade Center in 1993 and 2001 or the power outages in Michigan, New Jersey, Ohio, and New York in 2003. In total 14 out of 915 disaster declarations are not directly weather related and are excluded from the analysis. Including these incidents has no substantive impact on my findings.

Independent variables include measures of disaster damage, measures of a state's capacity to deal with disasters without the aid of the federal government, the electoral importance of a state, and information on the partisanship of the governor and congressional delegation as well as indicator variables for each president and year of administration.

To account for objective damage caused by weather events, I rely on insurance estimates of destruction. The Insurance Services Office (ISO) is a for-profit private company that compiles data on risk for clients who are primarily insurance companies. The Property Claims Service (PCS), a division of ISO, collects data specifically for severe weather events using a comprehensive database containing detailed information on insurable risks in any given ZIP code. Additionally PCS surveys insurance industry personnel as well as public officials to gather damage estimates.<sup>9</sup>

The data provided by PCS contain two measures of damage. First, PCS designates weather events as *catastrophes* when damage causes “\$25 million or more in insured property losses and affects a significant number of property and casualty policyholders and insurers,” a value that has been adjusted to take into account inflation.<sup>10</sup> I refer to catastrophes classified by PCS here as *actual disasters*. Second, for all actual disasters, I include the dollar value of damage. I refer to this variable as *insurance dollars*. These two variables provide information both on the number of disasters to hit each state each year in addition to the severity of the damage caused by the disasters.

From 1981 to 2004, there are a total of 3,282 actual disasters. Oklahoma has the most with 144, while Alaska had only 2 (see Table 1 for summary statistics). Actual disasters and presidential disaster declarations are correlated at 0.41. As included in the model, *insurance dollars* are adjusted for inflation and logged. The highest yearly total for a state is for Florida in 1992 when Hurricane Andrew helped push the total disaster damage to over \$20 billion (2001 dollars).

The number of electoral votes and the competitiveness of the statewide election are the two components of the electoral importance of a state. Although the number of electoral votes is highly correlated with population (0.99), I prefer the former because it reflects the actual electoral

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<sup>9</sup><http://www.iso.com/products/2800/prod2803.html> and <http://www.iso.com/products/2800/prod2803.html>, accessed 4 March 2009.

<sup>10</sup>[http://www.iso.com/press\\_releases/1999/01\\_12\\_99.html](http://www.iso.com/press_releases/1999/01_12_99.html), accessed 1 March 2009.

reward and hence the motivation of the candidate-turned-president. Competitiveness is measured as the loser’s share (as a percent) of the statewide two-party presidential vote averaged over the previous three elections. This measure is a scale from 0 to 50, where a score of 0 indicates that one candidate won all votes in the previous three elections, and a score of 50 indicates that the two major party candidates split the votes evenly in the previous three elections. By averaging over three elections the measure accounts for electoral variability in a state. One need only glance at electoral maps to see that states like New York and California which are not competitive today, were competitive only a few elections ago.<sup>11</sup>

	Mean	Std Dev	Min	Max
Presidential Disaster Declarations	0.8	1.0	0	6
Private Disaster Declarations	2.7	2.7	0	17
Electoral Votes	10.7	9.2	3	54
Competitiveness	42.4	4.2	26.5	48.6
Per Capita Personal Income (logged)	10.2	0.2	9.6	10.7
Insurance Dollars (logged)	13.6	7.7	0	23.7
Congressional Delegation Same Party as the President	0.5	0.3	0	1
Governor Same Party as the President	0.4	0.5	0	1

Table 1: **Summary Statistics** for variables included in the model. Insurance dollars and per capita personal income are adjusted for inflation. Summary statistics for these variables are from logged values.

To account for political characteristics of the state, I include partisan composition of the state’s congressional delegation and political party of the governor.<sup>12</sup> The congressional composition of a state is measure as the percent of senators and representatives who are of the same political party as the president. The party affiliation of the the congressional delegation and governor may reflect the pressure a president faces from important members of his own party. Since governors formally make the request for a disaster declaration, it is possible that the president may look more

<sup>11</sup>Averaging over two or three elections result in the same substantive results. I have also used alternative measures of competition with the same substantive results. For instance, I have measure competitiveness as the absolute difference between the national average of the candidate’s party’s vote percent and the percent received in the state, averaged over the previous two or three elections (as used by Johnston, Hagen and Jamieson (2004)). This measure may be less sensitive to the effect of third party candidates, and provides the same substantive results as those used here. For more information, see the supplemental materials available at the author’s home page.

<sup>12</sup>The data from which this measure was formulated were generously provided by James Snyder.

favorably upon requests made by governors of their own political party. Personal per capita income is included as a measure of a state's capability to handle destruction from disasters without aid from the federal government. Since a wealthy state should be better suited to provide disaster relief than a poor state, we expect a negative relationship between per capita income and presidential disaster declarations.

Because the presidential disaster declaration process is entirely at the discretion of the president himself, I include indicator variables for each presidential administration. To account for varying electoral circumstances during the first and second terms, I include indicator variables for each term of each administration. Since electoral considerations may be stronger during election years, I also include indicator variables for the year of administration with the expectation that more disaster declarations will be doled out during the second and fourth years of a term.

### **Empirical model**

Because the dependent variable is count data—the number of presidential disaster declarations in a state in a year—I use a Poisson regression.<sup>13</sup> Table 2 presents these results.<sup>14</sup> I split the data into two time periods and model the data from 1981 to 1988 separately from the data from 1989 to 2004. I do this because of potential variable parameter bias. The data cover an expansive time period and one model may not be (and indeed, I find that it is not) appropriate for the whole period. In this case, the Stafford Act and the context presidential electoral college victories change between these two periods and affect the influence of electoral variables. The first two columns are the coefficients and standard errors for the data from the pre-Stafford Act era ( $N = 400$ ) and the third and fourth columns are from the data for the post-Stafford Act era ( $N = 800$ ).<sup>15</sup> The results

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<sup>13</sup>A key issue here is the heteroscedasticity of the dependent variable, which is count data. I also tested the model using a negative binomial regression and used a square root transformation of the dependent variable. Both regression models yield the same substantive results and are included in the supplemental materials.

<sup>14</sup>These results are not driven by a single state. Excluding individual states like Texas, Florida, or California lead to the same substantive results. Testing the model with state fixed effects diminishes the effect of electoral vote size on the results but the effect of competitiveness remains.

<sup>15</sup>See the appendices for a pooled version of the regression. The pooled regression generates substantive results similar to the post-Stafford model but with attenuated effects of competitive although it is still positive and statistically significant.

	Pre-Stafford Act (1981-1988)		Post-Stafford Act (1989-2004)	
	Estimate	Std. Error	Estimate	Std. Error
(Intercept)	-3.01	6.55	5.39	2.97
Actual Disasters	0.17	0.03	0.09	0.01
Insurance Dollars (logged)	0.002	0.016	0.021	0.007
Personal Per Capita Income (logged)	0.17	0.66	-0.80	0.29
Electoral Votes	0.031	0.009	0.013	0.004
Competitiveness	-0.016	0.023	0.032	0.012
% Congressional Delegation same party as President	0.15	0.45	0.055	0.168
Governor same party as President	-0.24	0.17	0.044	0.075
Year 2 of Administration	0.43	0.23	0.07	0.11
Year 3 of Administration	0.18	0.24	0.17	0.11
Year 4 of Administration	0.26	0.24	0.40	0.14
Reagan (Term 1)	-0.05	0.17		
Clinton (Term 1)			0.13	0.12
Clinton (Term 2)			0.48	0.12
W. Bush			0.58	0.12

Table 2: **Model of Presidential Disaster Declarations, Split Sample. Pre-Stafford Act Model:** (columns 1 and 2)  $N = 400$ , omitted indicators are Year 1 of Administration and Reagan’s second term. **Post-Stafford Act Model:** (columns 2 and 3)  $N = 800$ , omitted indicator variables are Year 1 of Administration and H. W. Bush’s term. Both sets of estimates are from a Poisson regression.

in Table 2 support assertions that the Stafford Act transformed the disaster declaration process into a highly political exercise. Prior to 1989, there was a negative (but statistically insignificant) relationship between a state’s competitiveness and presidential disaster declarations. From 1989 onward, the effect of competitiveness is relatively large and statistically significant.

Suggesting a link between need and response, there is a positive and statistically significant relationship between actual disasters and presidential disaster declarations. Insurance spending is a strong and statistically significant predictor of presidential disaster declarations but only after 1988. Personal per capita income is negatively related to presidential disaster declarations but again only after 1988. Although the Stafford Act specifically forbids formulas from being used to determine disaster aid, FEMA reported in 1999 that it considered a state’s capacity to deal with a disaster when making recommendations to the president to accept or reject a disaster declaration (GAO, 2001). The relationships between presidential disaster declarations and partisanship of

the congressional delegation and governor are relatively weak and marked by a high degree of statistical uncertainty in both eras.

To gain more leverage on the coefficients and standard errors presented in the Table 2, I present simulations of predicted values based on manipulations of quantities of interest. I focus on the post-Stafford Act era and generate the analysis from the model in columns 3 and 4 of Table 2. Using the software developed and described in Imai, King and Lau (2009), Figures 1 and 2 display the effect of changing levels of competition and electoral votes respectively on the number of presidential disaster declarations while holding other variables constant at their mean values or median values where appropriate (see Table 1 for summary statistics). Competitiveness (in Figure 1) and the electoral vote size (in Figure 2) is varied over all observed values from the data set. The results allow us to gauge the effects of increasing or decreasing levels of our quantities of interest on the number of presidential disaster declarations.

Figure 1 presents the effect of competition on the expected number of presidential disaster declarations. The *y* axis marks the expected number of presidential disaster declarations for each scenario. The *x* axis present the value for the varying level of competition over all observed levels of competition for cases in the data set (26.5 to 48.5). One thousand simulations are run for each level of competition in the range by 5 point increments. Figure 1 presents the number of presidential disaster declarations expected from a state identical in all respects except level of competitiveness. A state where the loser receives an average of 26.5% is expected to receive 0.7 disaster declarations (the lower bound for the 95% interval is 0.4 and the upper bound is 1.1). A state where the loser received an average of 48.5% of the popular vote in the previous three elections is expected to receive 1.4 disaster declarations (the lower bound for the 95% interval is 1.1 and the upper bound is 1.7).

Figure 2 presents the relationship between electoral vote size and presidential disaster declarations. Again, the *y* axis presents the number of presidential disaster declarations expected based on the model. The *x* axis presents varying levels of electoral college vote size for all observed values in the data (3 to 55). One thousand simulations are run for each electoral college vote size

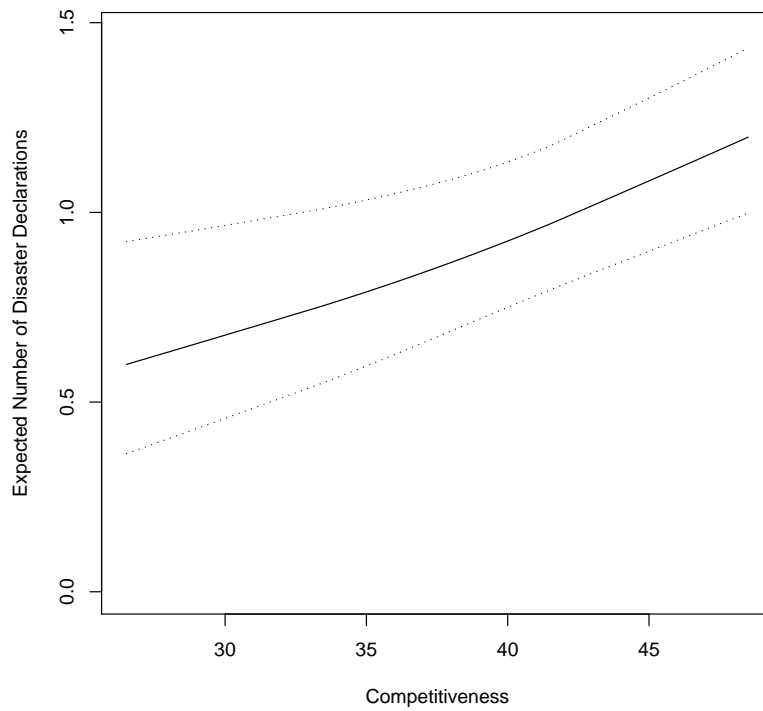


Figure 1: Number of presidential disaster declarations expected given model presented in Table 2 over varying levels of competition for post-Stafford era. Competitiveness is loser’s share of two-party vote in previous three presidential elections. As evident, as a state becomes increasingly competitive the number of expected presidential disaster declarations increases.

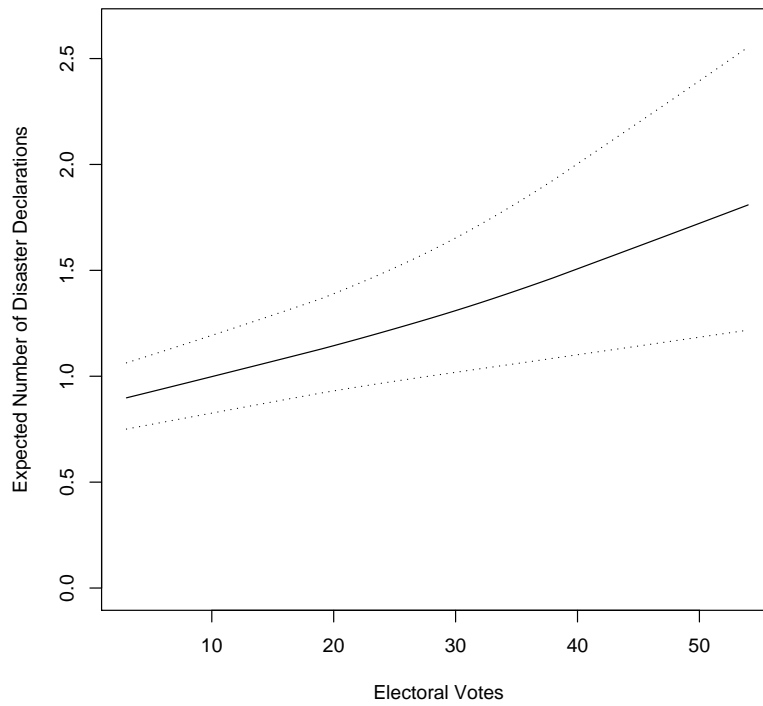


Figure 2: Number of presidential disaster declarations expected given model presented in Table 2 over varying levels of electoral college vote size for post-Stafford era. As evident, as the number of a state's electoral votes increases the number of presidential disaster declarations increases.

from 3 to 55 (by increments of 1). A state with 3 electoral votes is expected to receive 0.55 disaster declarations (the lower bound for the 95% confidence interval is 0.43 and the upper bound is 0.69) while a state with 55 electoral votes (but equal in all other respects) is expected to receive 1.26 presidential disaster declarations (the lower bound for the 95 % confidence interval is .89 and the upper bound is 1.67). Although dramatic changes in the number of electoral college votes is rare, decennial reapportionment of legislative seats has reallocated up to seven seats (and hence electoral votes) for an individual state (California from the 1980s to the 1990s).

How dramatic was the change before and after Stafford Act in 1988? To answer this question I examine the effect of competitiveness on presidential disaster declarations for each time period. Figure 3 presents two sets of first differences. The top half of the figure graphically displays the number of disaster declarations expected at high and low levels of competition in the pre-Stafford Act era, where all other values are held at their means or medians where appropriate. Surprisingly, prior to the Stafford Act there is a slight (although statistically insignificant) relationship between competition and disaster declarations. This same scenario is presented in the lower half of Figure 3 for the post-Stafford Act era. Here there is a relatively large and statistically significant difference between low competition and high competition states. In the post-Stafford Act era, a competitive state is expected to receive over twice the number of disaster declarations as a noncompetitive state — a competitive state is expected to receive 0.87 declarations with a 95% confidence interval from 0.73 to 1.03 and an uncompetitive state is expected to receive 0.43 declarations with a 95% confidence interval ranging from 0.29 and 0.64.

Following the Stafford Act there was a steady increase of disaster declarations. From 1981 through 1988, there were an average of 20.5 (standard deviation = 7.8) disaster declarations. This is well under half of the 46.9 (standard deviation = 16.0) average yearly disaster declarations from 1989 through 2004. What the analysis does reveal is that before the late 1980s there was no relationship between competitiveness and presidential disaster declarations, and since then electoral forces have played a much larger role. This change is not a result of the end of the Cold War. The Stafford Act predates the end of the Cold War and, to a greater extent, predates FEMA's conver-

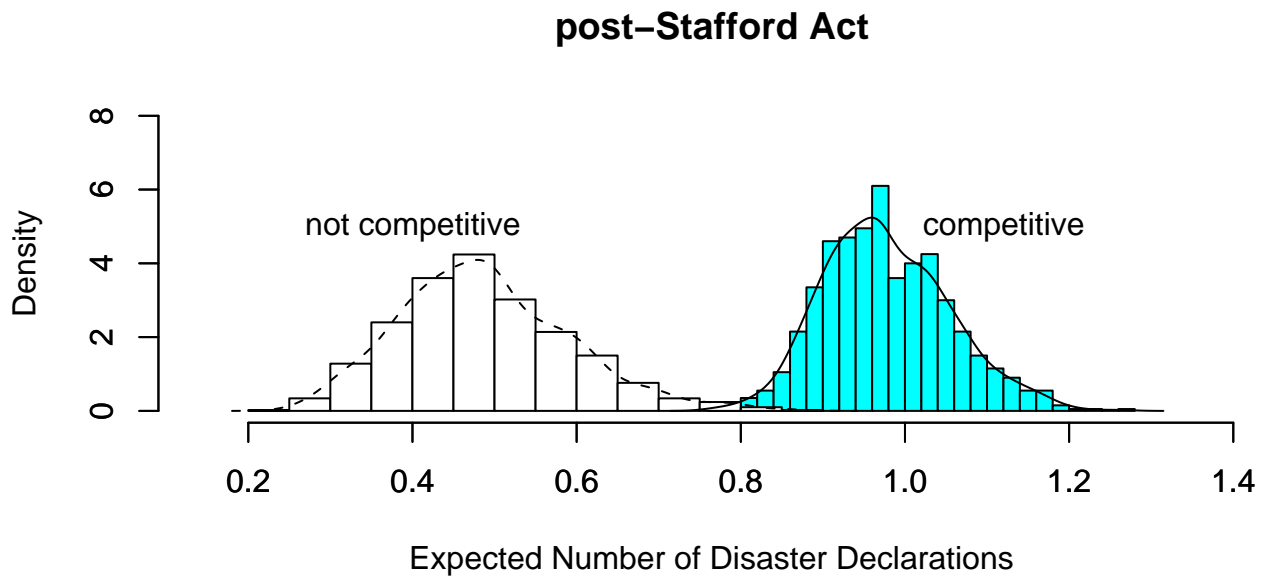
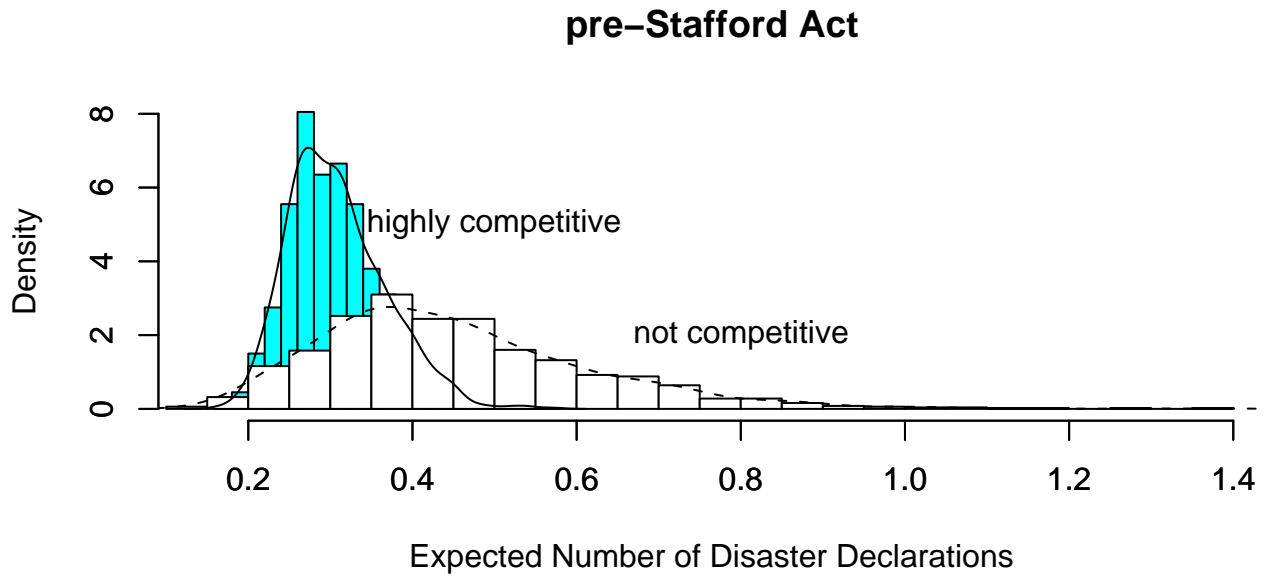


Figure 3: Number of presidential disaster declarations expected given models presented in Table 2 between states with the highest and lowest level of competitiveness. Competitiveness is a much stronger predictor of presidential disaster declarations in the post-Stafford Act era.

sion from a Cold War agency to an agency focused on domestic disaster relief efforts. Much to the chagrin of critics, FEMA was still focused on fallout from a nuclear war well after the Cold War (Tuller, 1989; Gup, 1994; Lipman and Jaspin, 1993).

### **How many votes is a presidential disaster declaration worth?**

In stark contrast to the campaign rally or a campaign television advertisement, disaster declarations provide presidentially authorized dollars to voters and advertise his leadership skills while avoiding most all of the partisan and ideological divisiveness that describes most campaign activities. If presidential disaster declarations are tools of reelection, are there payoffs come election day?

To gain leverage on this question, I analyze the relationship between statewide presidential election outcomes and presidential disaster declarations from 1984 through 2004. The dependent variable here is the president's percent of the two party statewide vote. The key independent variable is the number of presidential disaster declarations occurring from January 1 to election day of the year of the election.<sup>16</sup> Because the relationship between disaster declarations and election outcomes is likely a curvilinear relationship, I take the square root of this variable (Neter et al., 1996, p. 126). This transformation allows for the effect of the first disaster declaration to be larger than the effect of the second declaration, the effect of the second larger than the third and so on.

To control for the partisan preferences of the state, I include the two party statewide vote from the previous election, the party of the governor, and the partisanship of the Congressional delegation. I also include an indicator for whether or not the candidate is an incumbent. To account for presidential performance I include economic variables measuring personal per capita income of the state as well as the change between the 3rd and 4th quarter during the election year in personal per capita income.<sup>17</sup>

Table 3 present the results from the LS and 2SLS regressions. Because of a possible endoge-

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<sup>16</sup>If the incumbent is not running (George H. W. Bush in 1988 election and George W. Bush in the 2000 election) then I include the percent of the two party vote received by the candidate of the same party in the previous election — for example, Reagan's percent of the statewide vote in 1984 is used to predict Bush's share of the vote in 1988.

<sup>17</sup>Statistics on quarterly personal income were obtained from the Bureau of Economic Analysis (<http://www.bea.gov/region/sqpi/>, accessed 4 March 2009.).

nous relationship between disaster declarations and the electoral outcomes, I also present 2SLS estimates of the model.<sup>18</sup> Based on the Hausman statistic (5.21,  $p = 0.877$ ), the LS estimates are preferable to the 2SLS estimates. The Hausman test is a comparison of the variances of the 2SLS estimate and the LS estimate. The tradeoff is between bias and efficiency — 2SLS may improve bias but loses efficiency. In this case, LS is the better estimate. For completeness both estimates are presented, but only the LS results are discussed.

The results presented in Table 3 show that a single disaster declaration is worth about 1.7 percentage points in a state election outcomes ( $\sqrt{1} \times 1.7 = 1.7$ ). Because of the square-root transformation, each additional disaster declaration has a smaller marginal effect on the election outcome. For instance, the model would predict that 2 disaster declarations would yield 2.43 percentage points ( $\sqrt{2} \times 1.72 = 2.43$ ).

## Conclusions

When the confetti is done falling and the bands have stopped playing, the campaign is over and the job of governance begins. But the campaign will come again. In four more years the president or his party designate, will have again etch out a coalition of 270 electoral college votes if he wishes to remain in the White House. The findings here suggest that the specter of the campaign persists well after the president-elect thanks his campaign workers and graciously thanks his opponent for a worthy contest. The incentives of the election guide policy potentially to the detriment of the public good. Additionally, there are incentives in the form of votes to behave this way.

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<sup>18</sup>We can conceive of a variable called *campaign activity* which may explain both the election results as well as presidential disaster declarations. In the first stage the dependent variable is the square root of *presidential disaster declarations*. Taking the square root of heteroscedastic variable can account for the nonconstant variance. Although I use a Poisson regression in analyzing presidential disaster declarations, the square-root transformation produces the same substantive results. Using the square root transformation also greatly simplifies the calculation of the 2SLS regression coefficients and standard errors. Presidential disaster declarations is then regressed on all variables which explain vote outcome (the dependent variable in the second stage) in addition to instrumental variables. The instrumental variables here are actual disasters and the insurance dollars. For instruments to be valid, they must influence the election outcomes (the dependent variable in the second stage) only through presidential disaster declarations. The predicted values for presidential disaster declarations of this regression are then included as an independent variable in the second stage. The second stage regresses the election outcomes on the fitted values for presidential disaster declarations (the instrumental variable) on all variables from the first stage except the instruments (actual disasters and insurance dollars).

	Estimate	Std. Error	Estimate	Std. Error
(Intercept)	62.304	19.628	60.783	22.489
Percent of Presidential Vote in Previous Election	0.775	0.047	0.853	0.064
Presidential Disaster Declaration	1.727	0.489	6.375	2.095
Personal Per Capita Income (logged)	-5.022	1.903	-5.132	2.180
Change in Per Capita Income	0.670	0.229	0.767	0.265
% Congressional Delegation same party as President	4.254	1.436	2.218	1.867
Governor same party as President	-0.384	0.748	-0.543	0.860
Competitiveness	-0.123	0.080	-0.189	0.096
Electoral Votes	0.030	0.035	-0.031	0.048
Running as Incumbent	-0.091	0.652	-0.525	0.770
$N$	300		300	
$R^2$	0.648		0.538	
Hausman Statistic			5.206	
( $p$ -value)			0.877	

Table 3: **A Model of State-wide Presidential Election Outcomes:** Results from least squares (LS) and two-stage least squares regressions. In the 2SLS, the instrumental variable is *Presidential Disaster Declarations (square root)*. The instruments (which are excluded in stage two) are *Actual Disasters* and *Insurance Dollars (logged)*. First stage results are presented in the appendix

The all-or-nothing allocation of electoral votes, an institution not envisioned by the Founding Fathers, is at least partly to blame. If this convention were done away with (as it has been in Maine and Nebraska), a vote in a competitive state like Florida would not be worth so much more than a vote in a noncompetitive state like Texas. To go a step further, we might eliminate the electoral college all together to eliminate both the strange deviation of ‘one man, one vote’ and policy influence beyond the ballot box that it allows.

## A Model of Presidential Disaster Declarations, Pooled Regression

	Estimate	Std. Error
(Intercept)	4.758	2.703
Private Disaster Declarations	0.100	0.013
Insurance Dollars (logged)	0.018	0.007
Personal Per Capita Income (logged)	-0.654	0.262
Electoral Votes	0.016	0.004
Competitiveness	0.023	0.010
Reagan (Term 1)	-0.961	0.147
Reagan (Term 2)	-0.960	0.145
Bush	-0.473	0.117
Clinton (Term 1)	-0.343	0.107
W. Bush	0.111	0.098
Year 2 of Administration	0.119	0.100
Year 3 of Administration	0.145	0.100
Year 4 of Administration	0.358	0.097
% Congressional delegation party of President	0.059	0.155
Governor same party as President	0.008	0.068

Table 4: **Model of Presidential Disaster Declarations**, 1981–2004: Estimates are from a Poisson regression,  $N = 12,000$ .

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